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ABSTRACT

This publication examines seven programs that emphasize industrial and educational collaboration for special needs youth and adults in Illinois. The programs use various strategies to help persons with special needs, such as disadvantaged, handicapped, and limited-English-proficient persons, to prepare for the economic and employment mainstream. The seven programs are conducted by Training, Inc.; LIFT, Inc.; Electronic Industries Foundation; Minority Economic Resources Corporation; McDonalds Corporation; Illinois Bell; and Motorola. These programs were chosen for inclusion in the guide to illustrate the variety of target populations being served; a range of employment opportunities in new, emerging and technology-intensive occupations; and the array of training techniques, materials, and incentives used to educate special needs learners. A training program matrix in the guide summarizes the key components and types of students served for each of the programs. The final section of the guide describes the strategies that the programs use for collaboration with schools, community colleges, and other public agencies. A list of references and resources completes the publication. (KC)

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**INDUSTRY-EDUCATION
COLLABORATION FOR
SPECIAL NEEDS
YOUTH AND ADULTS**

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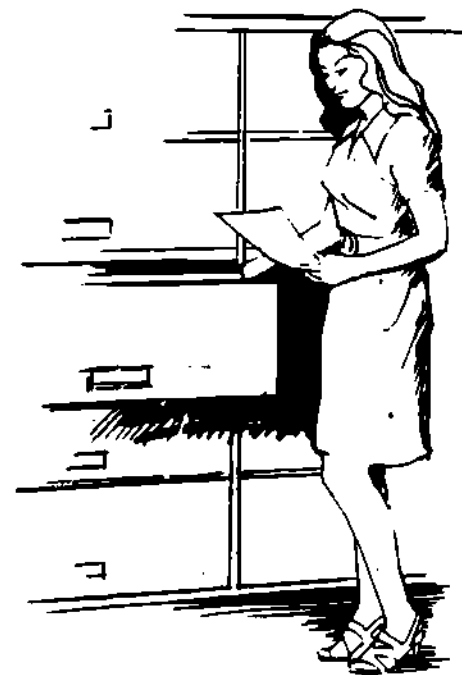
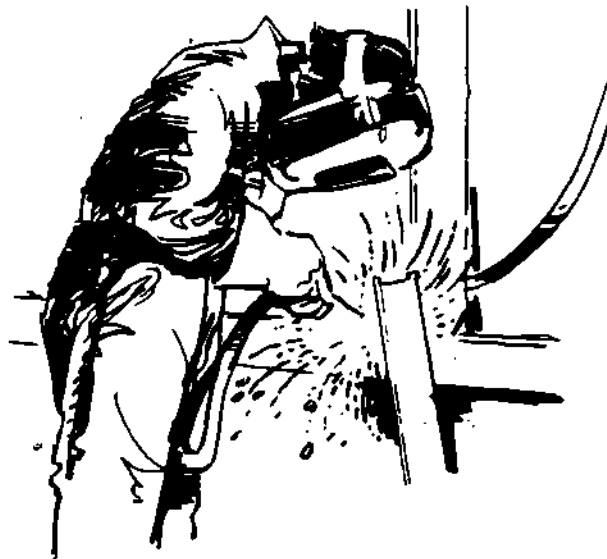
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Foreword

The Illinois State Board of Education and Department of Adult, Vocational and Technical Education recently completed an "Education for Employment Policy Study." Among the major recommendations is a call for closer collaboration between the private sector and the schools. Expanded and renewed collaboration is a critically important venture for the citizens and taxpayers of Illinois for several reasons. First, a continuing dialogue between schools, employers, organized labor, and business associations is critical to maintaining school curricula which prepare students with relevant and useful competencies—both academic and vocational competencies. Effective collaboration enables schools, community colleges, and local employers to share useful ideas, resources, and programs that can ultimately increase the effectiveness of public education. Third, comprehensive collaboration involving employers, parents, and other governmental agencies builds a valuable sense of collective, community ownership in the schools and their programs. Finally, ongoing collaboration is vitally important to the process of teacher-updating. To be effective in the classroom educators need to engage in and be exposed to the rapidly-changing components of our technological and informational society. Effective education-industry collaboration is essential if we are to expand and improve educational opportunities for the youth of Illinois.

This publication examines several programs and considerations that have emphasized industry-education collaboration for a specific group of individuals—special needs youth and adults. Individuals with special needs, such as the disadvantaged, handicapped, and limited English proficient, require special considerations by educators as well as employers as they seek to prepare these individuals for the economic and employment mainstream. The industry-based programs and collaboration strategies presented herein describe several effective approaches to preparing these students. I hope you will find this document helpful in your endeavors to strengthen and improve collaborative activities that aid special needs learners.



Donald G. Gill
State Superintendent of Education

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Special Needs Youth and Adults: A Vital Economic and Human Resource

In all communities, and thus in the vast majority of schools, there is a group of individuals who has difficulty, for a variety of reasons, in coping, adjusting, or succeeding in regular educational programs. Since the civil rights movement of the 1960s, we, as a nation, have become vitally concerned with assuring that these individuals have equal and appropriate opportunities to obtain a full education and productive employment. Through litigation and federal legislation, a clear and definitive commitment has been made to eliminating discriminatory practices in education, employment, social services and a host of other areas. This commitment exemplifies our continuing concern for the importance and value of education for all individuals in a democracy.

We have learned that educational and psychological labels have little value in describing the educational and employment potential, needs, and capabilities of handicapped and disadvantaged persons. To understand fully the nature of the educational problems that these individuals face, it is important to describe their special needs and unique capabilities in operational terms. The group described as "handicapped" includes individuals with emotional, behavioral, mental, learning, and physical disabilities. A student in this group may read at only the second-grade level after 12 years of school, have slurred speech and only very limited use of their legs due to cerebral palsy. However, they may also be highly proficient in assembling electronic circuit boards, reliable and productive as an assembly line worker, and capable of living independently in the community with little or no assistance. This is just one example of a severely handicapped person who, with appropriate support services during his participation in a vocational training program, has proven to be a vital resource for his employer. If national incidence figures are correct, there currently are approximately 38,000 handicapped youth between the ages of 14-21 in the state of Illinois who need special assistance with their education and the transition from school to work.

Academically and economically disadvantaged individuals are identified as such because of their need for special educational and/or financial assistance in order to succeed in educational programs or initial employment opportunities. Here again, the range of educational needs and capabilities is quite diverse. Students from poor or economically depressed communities may be disadvantaged because of poor school attendance records, lack of motivation for learning, underachievement, lack of financial resources to pay school lab fees, lack of appropriate parental role models at home, or a host of other problems which make effective participation in educational and training programs problematic. However, if given a chance to participate in a challenging vocational training program that leads toward realistic employment many of these students become highly motivated and exceed even their own performance expectations. During 1981-82, approximately 175,000 disadvantaged youth and adults were served in vocational education programs in Illinois' secondary schools and community colleges.

A third rapidly growing population are those individuals with limited English proficiency. In the past several years a large number of Indochinese refugees and immigrants have come to Illinois. In addition, there continues to be large Hispanic and language minority groups in Chicago and the surrounding suburbs. In 1982 approximately 58% of the school districts in Illinois enrolled some 58,000 students with limited English speaking ability.

The costs and benefits associated with providing vocational education and training for these groups clearly support the need for expanded education and training efforts. A recent cost study of eight programs for handicapped youth demonstrated that within an average of 4.3 years of employment following training, the total cost of the handicapped person's training program had been re-paid by the individual's state and federal taxes. The costs of *not* providing effective employment-related educational programs becomes clearly prohibitive when one considers the societal costs of incarceration (up to \$30,000 per inmate per year, plus law enforcement and court costs), institutionalization, social security disability insurance, unemployment compensation, food stamps, and the various other social welfare programs. The cost savings to taxpayers becomes quite significant when we strive to prepare individuals with special needs to live independently rather than dependently.

In addition to the economic benefits, there are several important outcomes which can be achieved but are often difficult to measure. These include:

- Building self-esteem, dignity, and self-respect within individuals who have encountered failure and attitudinal barriers.
- Expanding the level of productivity and output of the nation's workforce by assuring that individuals with special needs achieve a level of useful employability.
- Providing opportunities for individuals to become independent, contributing members of society.

Through collaborative training and developmental endeavors, industry and education can make an important and significant contribution to the development of one of our nation's most under-utilized and over-looked economic and human resources—the special needs population.

Industry-Based Training Programs

In the past decade employers in Illinois, as in other states, have developed and sponsored a variety of training programs to improve the employability and productivity of handicapped, disadvantaged, and limited English proficient youth and adults. Typically, these programs have focused on the development of the individual's work capacity, including the development of basic skills (reading, writing, communication), employability skills (work attitudes and values), and/or specific job skills. Some of these programs have been developed by individual companies, while others have been developed through national or state trade associations which represent employers in a specific field of manufacturing, service, or commerce.

Some of these training programs have been implemented in response to federal requirements for equal employment opportunity. Selected programs have been initiated because of a firm's specific commitment to a social responsibility role. Still others have been started as a result of the availability of federal and state funds for on-the-job training and related employment.

Presented below are seven selected programs which are currently operating in Illinois. These programs were selectively chosen to illustrate: the variety of target populations being served; a range of employment opportunities in new, emerging and technology-intensive occupations, and, most importantly, the array of training techniques, materials, and incentives used to educate special needs learners. Hopefully, a review of these programs will enable teachers, administrators, parents, and counselors to identify resources, techniques and program ideas that will be useful in high schools and community college programs. Further, it is hoped that the models presented herein can stimulate school, community college, and private sector representatives to launch or expand the linkages between private-sector sponsored training programs and public education programs throughout Illinois.

It should be noted that these programs are not necessarily representative of programs sponsored by business and industry throughout the state. These programs were selected because they present a variety of innovative and effective approaches to training special needs youth and adults.

A Training Program Matrix is presented at the end of this section which summarizes the key components and types of students served for each of the programs.

Selected Case Studies

Training, Inc.
401 North Wabash, Suite 532
Chicago, IL 60611

2625 Butterfield Road
Suite 304N
Oak Brook, IL 60521

Contact:
Mary Ann Walnwright,
Director
(312) 527-0276

(312) 323-8510



Training, Inc. is a clerical skills training program which was established in 1974 under the joint sponsorship of the DuPage County Employment and Training Office, the Central YMCA Community College, and the Oak Brook Association of Commerce and Industry. In 1978 a similar program was established in Chicago with the support of the Mayor's Office of Employment and Training, the Central YMCA Community College and Chicago United, a consortium of leading black, white and Latino business and professional people.

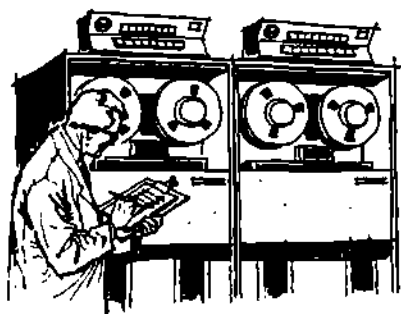
In both programs a simulated modern office, located in a business complex, allows students to work and learn in the midst of an operating business setting. In this setting students assume responsible work rules and learn by doing. The training curricula include: (a) clerical accounting, (b) general office procedures, (c) typing speed and production, and (d) career development instruction. In addition to teaching office skills, the curriculum deals with improving the student's self-image. Trainees are enabled to understand and exemplify in their own lives the basic character traits and attitudes valued in the business world as necessary for success on the job.

The program focuses upon the individual's total employability. The foundational skills of spelling, vocabulary, grammar, speech, composition and business math are integral to the program. These skills are taught in special review sessions and are reinforced in each course and learning situation. The career development curriculum enables the student to focus upon: (a) short and long-range employment goals, (b) job application procedures, (c) resume preparation, (d) job seeking and interviewing techniques, (e) financial and time management, (f) wardrobe and grooming, and (g) business ethics. The program also includes a two-week total office simulation which integrates all components of the curriculum. Prior to the end of the 12 week program, each participant has the opportunity to experience several job interviews.

Since its inception, Training, Inc. has served a wide variety of special population youth and adults, including disadvantaged and handicapped individuals, displaced homemakers, and immigrants and refugees with limited English proficiency. The program's effectiveness is reflected in its consistent graduation rate of 97%. Since 1979, more than 90% of the graduates have been placed in employment. "Alumni gatherings" are held on a regular basis to maintain contact between the program staff and former students.

Lift, Inc.
305 Pfingsten, Suite 103
Northbrook, IL 60062

Contact:
Charles W. Schmidt
(312) 564-9005



Lift, Inc. is a not-for-profit corporation which was founded in October, 1975 to provide vocational rehabilitation for the physically disabled. The primary activities of the company are the training and employment of intellectually qualified but physically disabled persons for computer programming.

Lift is not primarily an educational institution nor a job placement agency although it accomplishes both these objectives in its own unique way. Lift is better defined as a not-for-profit contract programming company which provides the computer programming services of its employees under contract to major corporations who eventually hire them directly.

Lift cooperates with city, county, and state vocational rehabilitation agencies, private rehabilitation hospitals and college placement offices to identify and select candidates who meet the requirements for the program. In general, successful candidates will have demonstrated a superior intelligence and motivation through previous educational or rehabilitation experience, although there are no strict education requirements. Because of limited resources, qualified candidates with severe physical disability are given preference.

The Lift training program consists of audio-visual courses published by Deltak, Inc. which is a leading supplier of such materials to industry. The program, which takes about six months, is undertaken in the home at no charge with twice-a-week visits by trainer/counselors. Although the subject material can be augmented or modified to meet the unique requirements of expected work assignments, the basic curriculum runs from "Basic Data Processing Concepts" through "Cobol", "PL/1" or "Assembler" programming languages and includes "hands on" experience coding practice programs using a remote terminal.

Lift assures its corporate clients that successful graduates of its training program will be competent "entry level programmers" and will perform satisfactorily and competitively in fulfillment of its contracts with clients. Accordingly, the progress of each trainee is reviewed closely, especially during the first 30 days to reconfirm the individual's qualifications to remain in the program.

Prior to acceptance of a candidate into the training program Lift introduces its concept to a potential corporate client. An informal commitment is secured, wherein the client agrees that, when and if the candidate successfully completes the training, the client will contract with Lift for sufficient programming projects to provide full-time work for the candidate for at least one year. This contract is priced at competitive rates and is subject to price competitive performance on all projects undertaken.

Although the employee is encouraged to commute to the corporation's office as often as practical, he typically works the majority of the time in his home using a remote terminal with keyboard, visual display and printer connected by telephone lines to the central computer.

Corporate clients are encouraged to and often do hire an employee directly after the minimum contract period of one year. In this way the contract relationship becomes a period of additional training, performance appraisal and orientation for the placement process under Lift supervision.

Lift currently has offices in Chicago, Boston, and Denver. A few of its forty or so corporate clients are Standard Oil of Indiana, 3M, Northern Trust, McDonald's Corporation, Continental Bank, International Harvester, Metropolitan Life, and RCA.

**Electronic Industries Foundation
Rehabilitation Institute of Chicago
Project with Industry**
345 East Superior Street
Chicago, IL 60611

Contact:
Lynn Miller
(312) 649-6275



The Electronic Industries Foundation (EIF) was established in 1975 as a non-profit, private organization by the Electronic Industries Association (EIA). The Foundation seeks to engage in national scientific, economic, social, and education programs utilizing the talents and capabilities of people in the electronic industries to the benefit of all. EIF represents 286 member companies nationwide. The industries cover approximately 30,000 different types of products ranging from microscopic components to large computer and control systems. Electronics represent one of the fastest growing industries in the U.S.

A national model for employment of handicapped individuals has been developed by the Electronic Industries Foundation (EIF). The model centralizes and manages a system of jobs and applicants. The two-fold advantage of this approach is: (a) employers gain outreach access to all major resources for handicapped applicants, and (b) handicapped individuals gain access to all job openings submitted by participating companies.

The EIF/RIC program in Chicago provides and collects information from both local employers and disabled individuals. Local industries are encouraged to list job orders with the EIF/RIC program. At present, over 70 companies are listing their job openings with the program. The program also works closely with several community agencies in the Chicago area, such as the Department of Rehabilitation Services, community colleges, rehabilitation facilities, and schools to identify job-ready, handicapped individuals. Detailed resumes are obtained from disabled individuals who are currently seeking employment. A "Job Candidate Guide" is prepared on a quarterly basis and circulated to participating employers.

Program staff attempt to match individual applicants with the most appropriate job openings, and assist in arranging for interviews for those persons with the companies. Typically, support and follow-up services are provided by the referring agencies during the transition and work adjustment period. These services are supplemented by the EIF/RIC program staff when necessary.

Through joint meetings between industry personnel and community agency and school personnel, greater communication has occurred regarding the education and employment needs of disabled individuals and prospective employers. The focus on industry's manpower needs, training requirements for special jobs, potential job modifications, and the special capabilities of handicapped individuals has been very enlightening and productive for everyone involved.

Since the program began in 1977, a total of 1965 handicapped persons have obtained employment and/or training placement through the program nationwide.

Minority Economic Resources Corporation
770 Lee Street
Des Plaines, IL 60016

Contact:
Diana B. Beesley, Director
Employment and Training
(312) 297-4705



Enhancing the economic vitality of the black and other minority communities is the challenge that the Minority Economic Resources Corporation (MERC) addresses. As workers and consumers, black and other minority people represent a seriously underdeveloped asset in the economic milieu. Despite the significant rights won by minority individuals through the civil rights movement, many minority people remain outside the economic mainstream.

In 1976 the MERC Training Department began to offer intensive technical training programs to prepare low-skilled minority workers for employment in technical occupations. MERC functions as a broker between business and service delivery area administrators. Curricula are developed consistent with company needs; funding for direct training costs is secured from prime sponsors and trainees are enrolled and prepared for meaningful new jobs. Through a company sponsorship program, many trainees, subsequent to MERC screening, are actually selected and mentored through training by employers who have guaranteed them jobs related to their training upon successful completion of the program.

Training has been offered in Electronic Technology, Chemical Technology, Machine Trades, Office and Clerical, Automated Accounting, and Word Processing/Data Entry. Each program is individually designed to accommodate the specific needs of employers. Consequently, MERC has succeeded in placing 90% of its graduates in training related jobs and better than 85% of those placed are retained and/or promoted over a 12 month period following training. Most of those who do not stay with their first employer either seek or are recruited for advanced positions at other companies.

Each training program contains four basic components: (a) skill training in a field offering genuine opportunity for economic advancement, (b) skill development in math and reading, (c) work attitude/work ethic development, and (d) job placement upon graduation.

The overall MERC organization includes a Minority Business Development Group (20 companies) and a Minority Industrial Relations Council (40 companies). Both groups help MERC to maintain an active partnership with the private sector.

McDonalds Corporation
1100 West 22nd Street
Oak Brook, IL 60521

Contact:
Pat Brophy
(312) 655-4050



In 1982 McDonalds Corporation, in cooperation with Chicago Services for Work and Rehabilitation (CSWR), launched a training and employment Program for handicapped youth in the south suburban area of Chicago. The program operates, in part, with funding from the federal Job Training Partnership Act.

The goal of the Program (entitled "McJob") is to provide skill training and job placement in the fast food service industry for mentally and physically disabled individuals. Training is provided over three months on-site at several McDonald's stores in the suburban area. The training is provided by a McDonald's employee, who serves as the "job coach." The Job Coach closely supervises and trains the clients for 20 hours per week during the breakfast and lunch shifts. The training consists of classroom instruction (using video-tapes), demonstration, and supervised practice on the grill, french fries, and clean-up operations in the store. In addition, the Job Coach is responsible for reviewing and evaluating trainee performance, developing a training schedule for each student, participating as a member of the store management team, and communicating with the client's Rehabilitation Manager at CSWR.

During the training period, the trainees are paid \$3.35 per hour and receive free meals and uniforms. Following the training period the trainees are employed at the store where they were trained and the Job Coach is assigned to a new store to begin a program with a new group of vocational rehabilitation-eligible youth. In order to graduate from the program, each trainee must work without a Job Coach for a period of two weeks, and successfully complete at least one end-of-day closing. At the conclusion of the training program, the trainees are invited to corporate headquarters in Oak Brook where they are presented with a silver spatula and dine in the corporate McDonalds.

Plans are now being developed to introduce the highly-successful McJob Program on a national basis.

**Illinois Bell and the
Chicago Board of Education**
225 W. Randolph
Chicago, IL 60606

Contact:
John Martin, Principal
Senn Metropolitan
High School for Technology
(312) 561-1031



Career Development Center for Business Computer Systems

The Career Development Center for Business Computer Systems is an educational Program designed to give high school students knowledge in systems analysis while introducing them to computer-related careers. This program is an integral part of the Chicago Schools Career Development Network, which is a cooperative endeavor between members of Chicago's business community and the Chicago Board of Education. Presently the program is operated through Senn Metropolitan High School for Technology.

Representatives from Illinois Bell collaborated with educators to develop a course that presents actual on-the-job experience in systems analysis. Team projects present the latest techniques of solving business problems with computers. Under the guidance of a specially-trained instructor, students work on actual business problems requiring computer solutions. They analyze the problems, develop solutions, present their solutions to others and implement their solutions in the same manner as professional analysts.

Upon successful completion of the one-semester course, students earn 1 1/2 credits in computer education. The class meets for 2 hours and 15 minutes each weekday afternoon at the Illinois Bell Telephone headquarters building at 225 W. Randolph in downtown Chicago.

All students who have completed one computer education class at their home high school are eligible to apply. Selection to participate in the program is based on attendance in school, grade point average, and teacher recommendations. Priority consideration is given to students who are juniors.

Motorola, Inc.
Corporate Offices: Motorola Center
1303 E. Algonquin Road
Schaumburg, IL 60196

Contact:
Barbara K. Walter
(312) 576-6698



Motorola, Inc. designs, manufactures, and markets high technology electronics products, components, and systems that are varied and sophisticated. Motorola equipment has been on most manned and every major unmanned space mission. Motorola products are used daily in automobiles, home appliances, and a wide variety of communications equipment. Their products help people to communicate, control, monitor, protect, explore, entertain, and more.

In the past as well as the present, Motorola has demonstrated deep concern for people. As a major governmental contractor, Motorola is fully committed to equal employment opportunity in principle, as a matter of corporate policy and in practice. Day-to-day progress and monitoring of the various programs and opportunities for qualified handicapped, disadvantaged, and minorities rest with directors of personnel and their compliance staff in the various groups and divisions across the country. Motorola utilizes and works extensively with specialized agencies such as the Urban League. Opportunities Industrialization Centers and local vocational rehabilitation centers in the recruitment and placing of handicapped, disadvantaged, and minorities. Additionally, Motorola has been involved in "Projects with Industry", to help handicapped workers become employable.

Employability programs offered through Motorola include a selective placement policy that matches the skills and talents of the handicapped individual with available jobs. Handicapped individuals are encouraged to register with the personnel department so that they may take advantage of special affirmative action programs that include counseling and follow-up. Job restructuring, flexible hours, work site modifications, accessibility as well as other alternatives are available where possible that allow qualified handicapped persons to become fully productive.

Participation in specialized education and training programs is also encouraged strongly. Motorola supports continuing education with a program of 100 percent reimbursement upon successful completion of specified courses. The courses must increase an individual's opportunity for advancement or be directly work related. Company sponsored college credit programs are also offered in electronics technology in the Phoenix, Chicago and Fort Lauderdale areas. A specialized training program for retarded individuals in Austin, Texas was developed and designed to provide specific skills for Motorola jobs. Additionally, Motorola provides a program that teaches colleagues and supervisors sign language that allows better communication between deaf employees and their co-workers.

Motorola has a strong commitment to the local community and groups which support affirmative action and related activities. Contributions for education, civic well-being, hospitals and cultural organizations are awarded through the Motorola Foundation. Goods and services are sought out from small businesses that are minority or female owned. Motorola employees visit schools to talk about the world of work, their specific jobs and encourage students to make the most of their educational opportunities. Motorola was among the original corporate participants in the Industrial Skills Center program, an innovative workshop for minority dropout students to learn basic electronics. The program is sponsored in Illinois by the Chicago Board of Education. It was Praised in the U.S. Senate as a "unique and viable solution for the problem of reducing our unemployment problem and achieving a quantum jump in increasing productivity."

Numerous awards have been bestowed on Motorola for their efforts in equal employment and affirmative action. Some of those awards are: "Outstanding Employer of the Year", 1980 from the Arizona Association for Retarded Citizens; "Outstanding Service Award", 1979 by the National Association of Black Manufacturers and "Employer of the Year for the Handicapped", 1980 Mayor's award in Austin, Texas.

Training Program Matrix

	Training, Inc.	LIFT, Inc.	Electronic Industries Foundation	Minority Economic Resources Corporation	McDonald's Corporation	Illinois Bell	Motorola
Special Populations Served							
Handicapped	•	•	•		•	•	•
Disadvantaged	•	•		•		•	•
Limited English Speaking	•			•		•	
Displaced Workers	•		•				
Services Provided							
Basic skills instruction/tutoring	•			•	•		
Employability skills instruction	•			•	•		
Specific job skill instruction	•	•		•	•	•	•
Job placement services		•	•	•	•		•
Work adjustment services		•	•	•	•		
Referral to other agencies		•	•				
Counseling	•	•	•				
Career planning	•	•					
Worksite modification		•					•
Workschedule modification		•					•
Program Components							
Business/industry advisory board	•	•	•	•			
Employment/work simulations	•				•	•	
Actual/simulated job interviews	•						
Alumni gatherings	•						
Employer/sponsor luncheons	•				•		
Career Resource speakers from industry	•			•			
Computer-assisted instruction		•				•	
Collaboration with special population agencies (e.g., Opportunities Industrialization Centers)	•	•	•	•			•

Collaboration and Linkage Strategies

The training programs described in the preceding section utilize a variety of techniques and strategies for collaboration with schools, community colleges, and other public agencies. Developing and maintaining these linkages is an essential prerequisite for assuring that vocational education and training programs are responsive to the needs of both the employer and the individual. This section will expand upon the strategies that can be used jointly by educators and trainers and other personnel from the private sector as they attempt to improve, coordinate, and strengthen their cooperative endeavors in serving youth and adults with special needs.

A 1981 national survey on career education and private sector collaboration conducted by the American Institutes for Research revealed over 75 percent of the companies surveyed were involved in some type of career education activities that required or resulted in interaction with schools. Examples of such activities included serving as resource persons, developing/providing materials, serving on advisory committees, providing equipment, conducting training sessions, providing experiential programs, and many others.

Although the level of activity and the degree of collaboration among organizations varies, the existence of such linkages demonstrates that there is a recognized need for and numerous benefits from collaboration between education and business and industry.

Preparing special needs youth and adults requires collaborative activity between education, industry, the community, and the home. In this section, selected collaborative strategies and techniques are provided to "spark" ideas for continued and increased interactions between the identified collaborators. Additional ideas can be found in the publications and articles listed in the "References and Resources" section.

Career development and training are not one-time occurrences; they are on-going and developmental. Thus, collaboration must not be a one-time happening; it must be like the individual—growing, developing, and productive.

Using Collaborative Advisory Councils

Collaboration between the private and public sectors (e.g., secondary schools, community colleges, vocational rehabilitation, and state or federally-sponsored job training programs) is generally most effective when those efforts are coordinated through some form of advisory/action council. The majority of the training programs described in the preceding section utilize collaborative advisory councils as an integral component in the overall program. Although referred to by several titles (e.g., "Industry-Education-Labor Councils," "Industry-Education Councils," "Business/Education Alliances"), there are three basic patterns for such councils:

- **Service provider style**—a specific set of services (e.g., curriculum career information for students, teacher orientation to career options) are developed for improving career training and employment opportunities for handicapped and disadvantaged individuals in which other businesses, industries, and community organizations can participate and support.

- **Facilitator/broker style**—assistance is provided to training and employment leaders and organizations to identify and resolve common problems that may serve as barriers to competitive employment for persons with special needs.
- **Special projects style**—projects are designed and initially operated for the purpose of collaborative problem-solving or conducting one time fact-finding and analysis.

Councils may be all one style or, more commonly, a combination of two or three styles.

Collaboration is best exemplified when advisory councils exhibit four major characteristics.

- **Membership is representative** of the major groups concerned with and involved in improving education, training, and competitive employment opportunities for individuals with special needs. For instance, collaborative activities and directions should be established which will join and serve more than two sectors (i.e., special education, vocational education, rehabilitation, Job Training Partnership Act (JTPA), business/industry). Councils should treat the collaborating institutions/agencies as equal partners. Although, in particular instances, the strength and interest of one or two organizations may predominate, the goal of the council should be to meet multiple purposes rather than those of a few.
- **Councils are self-organized.** Although perhaps initially sponsored by one organization (e.g. secondary-school special education), the council, once organized, should be responsible for its own continuity. The agenda should not be directed by any one of the collaborative partners. Over time, responsibility for leadership of the council should be rotated and shared appropriately.
- **Councils are performance oriented.** The membership should develop their own agenda and approaches to addressing the employment and education needs and concerns of the special needs individuals in their community. Although a major role may be advisory, the councils may engage in activities which include fact-finding, project operation, program development, and program brokering.
- **Responsibility for implementing the action plans** developed by the council is *shared*. Because the members comprising the council are the active leaders in their respective organizations, the effectiveness of collaborative efforts is greatly enhanced when shared interest results in mutual action.

Activities conducted by collaborative advisory councils generally focus on issues related to:

- Research
- Public awareness
- Student development
- Staff development
- Administrative/Policy concerns

Examples of such activities might include:

- conducting a needs assessment of the local community's perceptions of education and training needs of handicapped and disadvantaged persons. (Research)
- developing and publishing a newsletter that highlights exemplary education, rehabilitation and industry training programs for handicapped and disadvantaged persons. (Public awareness)

- facilitating site visits to businesses and industries by high school and community college special needs students for on-site presentations and interaction with people at work. (Student development)
- working with vocational teachers, special education teachers, and counselors to modify their curriculum and instructional processes to meet the career development and skill training needs of handicapped and disadvantaged persons. (Staff development)
- establishing school/business partnerships (e.g., equipment donation and/or sharing programs) which will actively work to expand and enrich the students' career development and training experiences. (Administrative policy concerns)

Each sector participating on an advisory collaborative council will have its own particular needs and concerns related to preparing handicapped and disadvantaged individuals for competitive employment. Each will have some hesitations, biases, and practical considerations about such involvement. However, there will also be some very important shared concerns: the quality of life in the community; quality of education; the future of economic competitiveness; and the development of the individual which results in capable, dedicated, and motivated individuals with pride in themselves.

Obtaining Career Information

Obtaining, storing, retrieving, and disseminating career information can be a major undertaking. The information or knowledge explosion is a well-known reality. Career information materials become outdated and must be reviewed and replaced on a regular basis. New jobs and occupations come about because new products, services, and industries evolve from new knowledge. New jobs, in turn, generate more new jobs and occupations.

Collaboration efforts among educators, rehabilitation personnel, and employers are needed to identify career information sources; keep resources up-to-date, and disseminate information to students. Special needs students must not be provided with "old" information or trained at a skill level that has since changed substantially.

Traditionally, the most used career information resource by students and teachers have been bound reference publications such as the *Occupational Outlook Handbook*, *Dictionary of Occupational Titles*. Although these are valuable sources of information, there is a wide variety of additional resources and methods for obtaining information that are often overlooked or used sparingly. A variety of learning styles and information needs on the part of students dictates the need for a variety of resources and methods of obtaining information.

To provide most effectively for the career development needs of the handicapped or disadvantaged person, one has to consider what levels of knowledge, self-understanding, personal experience, interests, and motivations characterize each individual case. It must then be determined what particular sets of exposures or experiences will meet the individual's needs for further career development.

It is important for special needs learners to have career information which includes:

- Employment trends;
- Job opportunities that are unique to certain handicaps, but that avoid stereotypes;
- Earnings, working conditions, and fringe benefits;
- Career ladders;
- Required education (before and after initial employment); and
- Affirmative action policies of companies/employers.

Although in some cases it may be necessary to make modifications in the presentation of the information, industry and education can work together to acquire and present career-related information using a variety of sources and methods such as the following:

- Films or video tapes on various new technologies and related job opportunities
- Trade magazines, newspapers, and journals
- Pamphlets, briefs, and kits describing various careers
- Card sort activities to identify career interests
- Computerized career information systems
- Reports by former students regarding earnings, working conditions, career ladders, and education needs
- Interviews with employed workers in various occupations
- Visits to businesses and work sites
- Job shadowing and other observation experiences for various occupations
- Hands-on experiences using equipment donated by business and industry

Providing In-School Career Development Resources

Developing or modifying a vocational education program to better meet the needs of the individual students, school, and community is difficult to do in isolation. Collaborative efforts between education and business/industry will increase the offerings and resources that can be provided in the school, and thus, help meet the diverse needs of special needs students in terms of their interests, skills, and aspirations. Representatives from Illinois Bell, Motorola, the Electronics Industry Foundation, and other businesses throughout Illinois have taken a sincere and genuine interest in providing guest speakers and other in-school career development resources.

The following collaborative strategies are examples of how individuals from business/industry and community organizations can be used to enrich in-school vocational education resources for handicapped and disadvantaged persons:

- Serve as resource persons to help students understand and appreciate the relationships between subject matter being taught in school and jobs in the work world.
- Provide employed handicapped individuals as role models for students interested in pursuing employment opportunities in a particular field.
- Provide opportunities for students to make first-hand observations in local business and industry settings.
- Provide opportunities for students to obtain paid or unpaid work experience where appropriate.
- Provide entry-level jobs on a part-time basis for in-school students.

- Assist students in studying the affirmative action policies and Programs of selected employers.
- Assist in conducting vocational education courses or units for a short period of time.
- Serve as resource persons to help students learn how to find jobs, perform on the job, and retain jobs.
- Arrange for and conduct field trips for students.
- Help students learn how to deal with and overcome work-related stereotyping (i.e., handicap stereotyping and occupational stereotyping)
- Help students learn about and engage in career decision making.
- Introduce students to volunteerism as an acceptable form of work and its value to society.

Providing Inservice Education Programs and Personnel Exchanges

To be effective, vocational education must be current and responsive to changes in the workplace. With the influence of high technology, work settings are changing at a rapid rate; the changes will be even more drastic as we continue through the 1980s. Collaborative inservice programs for teachers and counselors and personnel exchanges between business/industry and education provide a vital part of the solution in addressing these ever-changing needs.

Inservice Education for Vocational/Special Education Personnel

Vocational/special education teachers and counselors face a major challenge as they work to be certain that the training programs and related courses offered by the school adequately and appropriately prepare special needs students for employment.

Employment-related terminology should be incorporated into the school or community college program. The following inservice activities for teachers and counselors are suggested as a means for improving courses and aligning them with current practices and trends in the work world.

- Participate in "Adopt-a-Teacher" programs which enable teachers to explore, study, and work in a variety of occupational roles within a local business firm, health care setting, or governmental agency.
- Spend time each summer with several employers who provide on-the-job training programs.
- Question business/industry personnel about the content and need for academic and basic skills subjects.
- Observe the procedures employers use in integrating academic subject matter and skill training (e.g., what math concepts are needed for the job and how are students learning these concepts)
- Interview students who have completed cooperative work experiences (those who are now engaged in competitive employment and those who are not)
- Participate in regularly scheduled "alumni gatherings" to maintain contact between the program staff and former students. The Training, Inc. Program has found this activity to be very useful and effective.
- Attend some of the seminars and workshops offered by local firms for their employees and supervisors on topics such as affirmative action, hiring procedures, training programs, and new technologies.

- Attend training Programs and workshops offered by business and industry which are designed specifically to assist handicapped or disadvantaged employees, as well as regular training sessions which accommodate these individuals. Identify appropriate adaptations of these training sessions which can be incorporated into the school curriculum to enhance a smoother transition from school to employment for the student.

Inservice Education for Business/Industry Personnel

Many employers and potential employers have not had the opportunity to work with a handicapped or disadvantaged employee. As students progress through programs to become prepared for employment, so too must employers be "educated" in understanding and accepting the person with a disability or disadvantage as a valuable employee and an asset to the organization.

To promote a successful employment experience for the special needs student, school personnel can sponsor and conduct inservice education programs tailored specifically for local business and industry personnel. The following topics might be addressed:

- The attitudes and philosophy of supervisors and co-workers can effect the student's job success or failure. Erroneous generalities regarding people with special problems are gradually dispelled as the student proves his or her capability on-the-job.
- Working with a handicapped individual can be a challenging and rewarding assignment. From the beginning it should be the goal to work with or hire a qualified and productive person. Neither the individual nor the school at which he/she received training are interested in charity. The employers should expect and insist on a productive trainee or employee.
- Employers must be careful not to underestimate the student's potential performance capability. Assumptions about what someone can and cannot do, based strictly on functional abilities, should not be made.
- There may be labels or phrases that are offensive to some people with disabilities. Stereotyped labels such as "deaf and dumb," "crippled," "victim," "helpless," "unfortunate," and others should be avoided. The appropriate approach is to use the same language with special needs youth as would be used with all other employees.
- It is not necessary, in most cases, for accommodations or modifications to be expensive. Automatic floor pressure door openers and widening of doorways may be necessary but the government gives employers certain tax breaks on architectural modifications made to improve building accessibility.
- The employer should be informed of the resources available to him or her. This may include support personnel from the school, the Department of Rehabilitation Services, and local job training programs, as well as information on job adaptation and financial assistance in employing people with disabilities.
- For the safety of disabled employees, job supervisors may need specific information instruction about the individual's disability (e.g., a program that teaches

industry employees and supervisors sign language for better communication between deaf employees and their co-workers). Motorola Corporation has found sign language classes for their employees to be very effective in building support for the hiring of deaf individuals.

Collaborative activity can also provide an opportunity for interested school staff and business/industry personnel to exchange career roles for varying periods of time. This might range from one day to several weeks. Such a program can be designed to allow a teacher to participate in a two to five-day internship with a supervisor or worker at a training site where his/her students are participating. A training supervisor might also be provided a one to five-day opportunity to serve as an instructor in a career education class or vocational education lab.

Inservice tours of industry and educational facilities provide the opportunity for small groups of teachers and business/industry personnel to meet informally with each other to develop a better understanding of the roles each plays in achieving the mutual goals of education and industry.

Inservice education is an ongoing process and must play a significant role in a collaborative program between the private and public sectors. Much can be gained by sharing ideas and resources. The key is to learn from each other.

Involving Parents in Career Planning

Parents, or those with whom a young person lives, have potentially the greatest influence on that young person during his/her developmental years. Although not always the best judge of what career path their child should pursue, parents are the strongest motivator for a high school student to seek career information. Students tend to be strongly influenced by those at home, and not by someone in an office or school.

Not only do parents influence their child's vocational and educational aspirations, they also play a significant role in their child's career planning and decision making. Most parents regard career planning as an important parenting task but feel unsure and unprepared to help their child make career decisions.

Since handicapped and disadvantaged youth are generally in the home longer than others, and since they will have to be cared for more intensively than the average child, it is imperative that parents be offered and obtain specific training in learning about their role in career planning and how to function effectively in this role.

Freedom of choice is a primary concern for all persons making career decisions. That freedom is limited if a person is not permitted to engage in some trial and error. Because it is possible to identify several potential talents in a person, the earlier an individual develops a sense of identity and a feeling of worth, the better he or she will be to make wise and realistic choices. Career planning begins early in a person's life and should be viewed as a developmental process.

Recently educators and business/industry personnel have recognized the need for collaborative efforts in career planning for students. They have also recognized the importance of developing programs for involving parents. The following strategies are suggested collaboration activities:

- Conduct meetings to increase parents' understanding of curricula and activities being offered in the school for handicapped and disadvantaged persons (i.e., linkages between subject matter and careers, cooperative programs between schools and local businesses/industries).
- Conduct joint meetings of parents, educators, community organization representatives, and business/industry persons to address the need for basic skills, employability skills, and specific job skills for handicapped and disadvantaged persons.
- Publish informational materials that will provide parents with suggestions and activities for providing (home based) career experiences that will complement those offered in school.
- Provide parents with opportunities to serve as career resource persons in their children's classrooms.
- Provide parents with opportunities to assist school personnel in obtaining, cataloging and updating career education resource materials.
- Open up business and industry settings on weekends for field trips for special needs youth and their parents who are interested in learning more about competitive employment options.
- Develop a data collection process (mail survey or personal interviews) and instruments to identify potential resources for involvement in career development and training programs for special needs individuals. Include all of those resources currently available and/or participating in the program.
- Determine the resources needed by the vocational special needs programs that are not currently available.
- Contact business and industry personnel (e.g., training directors, human resource development personnel) and acquaint them with programs available for special needs persons and the needs of the program, suggest tentative ways they can contribute resources, and obtain commitments to provide resources.
- Develop a local business/industry resource directory that specifies name and location of company/organization, types of resources, purpose/s, availability restrictions, contact persons, special consideration, for use, and relationships to (in-school and training) program components.
- Update the directory on a regular basis through ongoing contacts with resource providers and users.

Developing a Local Business/Industry Resource Directory

Resources that are available in most communities to be used in providing educational and training programs for special needs learners are of four categories: human resources, material resources, technical resources and fiscal resources. All should be included in developing a local industry locally-based resource directory.

Human resources are those individuals with a special interest, commitment, or expertise related to educating, counseling, or tutoring special needs individuals.

Material resources may include publications, supplies, counseling and instructional materials, donated equipment and other material goods which are generally available from businesses, governmental agencies, organizations, and individuals within the community.

Technical resources are those individuals who have expertise in planning and implementing programs for special needs individuals. Technical assistance is available from business and industry in the form of seminars, workshops, and training programs.

Fiscal resources are money or contributions of resources. Although fiscal resources come primarily through Federal and State legislation, and local taxes; contributions from the private sector, foundations, and community organizations may also be available.

All types of resources should be examined and where appropriate and feasible, included in a local business/industry resource directory. Consider using a collaborative approach (educators, business/industry persons, rehabilitation personnel, community organization leaders), and the following steps in developing a directory:

- Identify and describe several major potential resources—human, material, technical, and fiscal—that are present in the business and industry sector of the community.

References and Resources

This section contains a list of helpful references regarding industry-based training programs, collaboration strategies, and the education and employment of special populations. In addition, a series of additional resource organizations and agencies are described.

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Resources

- **Career Guidance Center Network**
Illinois State Board of Education
100 North First Street
Springfield, IL 62777
217/782-5098

This network of 12 centers is designed to assist public and private educational agencies in the improvement of vocational guidance services for students. Career information, inservice workshops, and newsletters are available through the Centers.
- **Technical Assistance & Dissemination Network for Illinois Special Needs Population**
Illinois State University
Turner Hall 205
Normal, IL 61761
309/438-3627

Services are available to aid educators in individual career planning for special needs students. A periodic newsletters and other publications related to vocational education for special education for special populations can be obtained.
- **American Society for Training and Development**
600 Maryland Avenue, SW
Suite 305
Washington, DC 20024
202/484-2390

ASTD is a non-profit educational organization serving 23,000 practitioners, managers, administrators, and educators in the field of human resource development. The services available to members include: a monthly journal, newsletters, national conference, and professional development workshops. Special interest groups for the training of handicapped and minority individuals are available.
- **Office of Career Development for Special Populations**
University of Illinois
345 Education Building
1310 South Sixth Street
Champaign, IL 61820
217/333-2325

This Office conducts research, staff training, and evaluation activities related to the career development and employment of special populations. An extensive list of publications is available.
- **Illinois Department of Adult, Vocational and Technical Education Consultant Services Section**
Illinois State Board of Education
100 North First Street
Springfield, IL 62777
217/782-4877

Consultant services are available to assist schools, area vocational centers, and community colleges in developing vocational programs for disadvantaged, handicapped, and limited English proficient youth and adults.

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PROJECT TITLE: *Identifying and Linking with Industry-Based Training Programs for Special Needs Youth and Adults*

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